

We Claim:

1. A process for treating an eye, which comprises:
topically applying an azalide antibiotic to an eye in an amount effective to treat or prevent infection in a tissue of the eye.

2. The process according to claim 1, wherein said topical application comprises supplying a depot of a composition containing said azalide antibiotic on the eye.

3. The process according to claim 2, wherein said depot is a composition selected from the group consisting of an aqueous suspensions, ointments, and inserts.

4. The process according to claim 2, wherein said topically applied depot remains for at least 30 minutes after administration.

5. The process according to claim 4, wherein said depot remains for at least 4 hours after administration.

6. The process according to claim 3, wherein said composition further comprises an additional medicament.

7. The process according to claim 6, wherein said additional medicament is selected from the group consisting of antibiotics, antivirals, antifungals, anesthetics, anti-inflammatory agents, and anti-allergic agents.

8. The process according to claim 1, wherein said depot is an aqueous polymeric suspension of said azalide antibiotic.

9. The process according to claim 8, wherein said aqueous suspension comprises water, 0.01% to 1.0% of an azalide antibiotic, and 0.1 to 10% of a polymeric suspending agent.

10. The process according to claim 9, wherein said polymer suspending agent is a water-swellable water-insoluble crosslinked carboxy-vinyl polymer.

11. The process according to claim 10, wherein the polymer is comprised of at least 90% acrylic acid monomers and 0.1% to 5% crosslinking agent.

12. The process according to claim 11, wherein the crosslinking agent is a difunctional crosslinking agent.

13. The process according to claim 12, wherein said crosslinking agent is selected from the group consisting of divinyl glycol, 2,3-dihydroxyhexa-1,5-diene, 2,5-dimethyl-1,5-hexadiene, divinylbenzene, N,N-diallylacrylamide, N,N-diallylmethacrylamide, and mixtures thereof.

14. The process according to claim 11, wherein said polymer is a polycarbophil.

15. The process according to claim 11, wherein said polymeric suspending agent is contained in an amount of from about 0.5 to 1.2%.

16. The process according to claim 15, wherein said polymer has a monodisperse particle size distribution.

17. The process according to claim 16, wherein said azalide antibiotic is azithromycin.

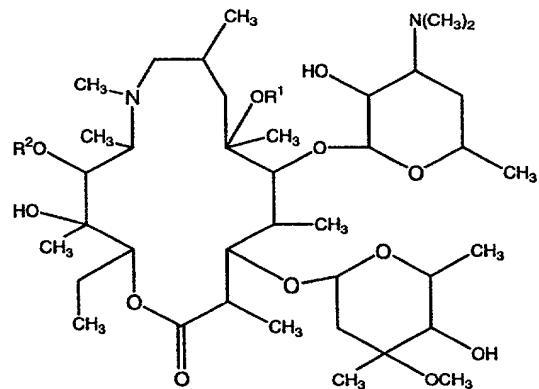
18. The process according to claim 17, wherein said azalide antibiotic is azithromycin dihydrate.

19. The process according to claim 8, wherein said aqueous polymeric suspension further comprises an additional medicament.

20. The process according to claim 19, wherein said additional medicament is selected from the group consisting of amikacin, gentamycin, tobramycin, streptomycin, netilmycin, kanamycin ciprofloxacin, norfloxacin, ofloxacin, trovafloxacin, lomefloxacin, levofloxacin, enoxacin, naphthyridine, sulfonamides, polymyxin, chloramphenicol, neomycin, paramomomycin, colistimethate, bacitracin, vancomycin, tetracyclines, rifampins, cycloserine, beta-lactams, cephalosporins, amphotericins, fluconazole, flucytosine, natamycin, miconazole, ketoconazole, corticosteroids, diclofenac, flurbiprofen, ketorolac, suprofen, comolyn, lodoxamide, levocabastin, naphazoling, antazoline, and pheniramimane.

21. The process according to claim 1, wherein said eye is suffering from at least one condition selected from the group consisting of conjunctivitis, ophthalmia neonatorum, trachoma, corneal ulcers, keratitis, keratoconjunctivitis, endophthalmitis, infectious uveitis and combinations thereof, and said amount of said azalide antibiotic is therapeutically effective to treat said condition.

22. The process according to claim 1, wherein said azalide antibiotic is a compound of formula (I):



(I)

wherein R¹ and R² each independently represent a hydrogen atom or a methyl group.

23. The process according to claim 22, wherein said azalide antibiotic is azithromycin.

24. The process according to claim 1, wherein said application provides a therapeutically effective concentration of azalide antibiotic within a tissue of the eye for at least 8 hours.

25. The process according to claim 24, wherein said application provides a therapeutically effective concentration of azalide antibiotic within a tissue of the eye for at least 12 hours.

26. The process according to claim 25, wherein said application provides a therapeutically effective concentration of azalide antibiotic within a tissue of the eye for at least 18 hours.

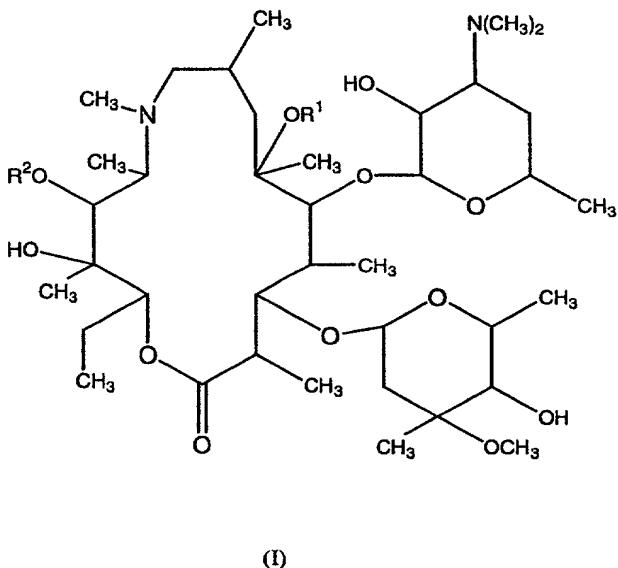
27. A process for treating ocular infection, which comprises topically applying an ophthalmic composition containing an effective amount of an azalide antibiotic to an eye suffering from infection once or twice a day for one to three days.

28. The process according to claim 27, wherein the total application of ophthalmic composition provides a 6 to 14 day treatment concentration within the ocular tissue.

29. The process according to claim 28, wherein the total application consists of one or two applications.

30. An aqueous polymeric suspension comprising water, 0.01% to 1.0% of an azalide antibiotic and 0.1 to 10% of a polymeric suspending agent.

31. The suspension according to claim 30, wherein said azalide antibiotic is a compound of formula (I):



(I)

wherein R¹ and R² each independently represent a hydrogen atom or a methyl group.

32. The suspension according to claim 31, wherein said azalide antibiotic is azithromycin and is contained in an amount of 0.1 to 0.5%.

33. The suspension according to claim 31, wherein said polymeric suspending agent is comprised of at least 90% acrylic acid monomers and 0.1% to 5% crosslinking agent.

34. The suspension according to claim 30, wherein said azalide antibiotic is in suspension and said suspending agent is hydroxypropylmethylcellulose.

35. The suspension according to claim 30, wherein both the azalide antibiotic and the polymeric suspending agent are in suspension.

36. The suspension according to claim 30, which further comprises an additional medicament.

37. The suspension according to claim 36, wherein said additional medicament is selected from the group consisting of antibiotics, antivirals, antifungals, anesthetics, anti-inflammatory agents, and anti-allergic agents.

38. The suspension according to claim 37, wherein said additional medicament is contained in an amount of from 0.01 to 5.0%.

39. The suspension according to claim 36, wherein said additional medicament is selected from the group consisting of amikacin, gentamycin, tobramycin, streptomycin, netilmycin, kanamycin ciprofloxacin, norfloxacin, ofloxacin, trovafloxacin, lomefloxacin, levofloxacin, enoxacin, naphthyridine, sulfonamides, polymyxin, chloramphenicol, neomycin, paramomomycin, colistimethate, bacitracin, vancomycin, tetracyclines, rifampins, cycloserine, beta-lactams, cephalosporins, amphotericins, fluconazole, flucytosine, natamycin, miconazole, ketoconazole, corticosteroids, diclofenac, flurbiprofen, ketorolac, suprofen, comolyn, lodoxamide, levocabastin, naphazoling, antazoline, and phenirramimane.

40. A composition comprising an effective amount of an azalide antibiotic, and additional medicament, and an ophthalmically acceptable carrier.

41. The composition according to claim 40, wherein said azalide antibiotic is azithromycin.

42. The composition according to claim 40, wherein said additional medicament is selected from the group consisting of antibiotics, antivirals, antifungals, anesthetics, anti-inflammatory agents, and anti-allergic agents.

43. The composition according to claim 42, wherein said composition is fluid;

said azalide antibiotic is contained in an amount of from about 0.01 to 2.0%; and said additional medicament is contained in an amount of from about 0.01 to 5.0%.

44. The composition according to claim 43, wherein said ophthalmically acceptable carrier is water or an aqueous solution and said additional medicament is selected from the group consisting of amikacin, gentamycin, tobramycin, streptomycin, netilmycin, kanamycin ciprofloxacin, norfloxacin, ofloxacin, trovafloxacin, lomefloxacin, levofloxacin, enoxacin, naphthyridine, sulfonamides, polymyxin, chloramphenicol, neomycin, paramomomycin, colistimethate, bacitracin, vancomycin, tetracyclines, rifampins, cycloserine, beta-lactams, cephalosporins, amphotericins, fluconazole, flucytosine, natamycin, miconazole, ketoconazole, corticosteroids, diclofenac, flurbiprofen, ketorolac, suprofen, comolyn, lodoxamide, levocabastin, naphazoling, antazoline, and pheniramimane.